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EXAMINER	
PATEL, MAHENDRA R	
ART UNIT	**PAPER NUMBER**
4172	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/570,597	PEISA ET AL.	
	Examiner	Art Unit	
	MAHENDRA R. PATEL	4172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03/06/20060* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/06/2006*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to application filed on 02/05/2007.

Claims 1-14 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. **Claims 1-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashem et al. (US 20030058833 A1), in view of Willenegger et al. (US 20030174675 A1).

Regarding claim 1, Hashem teaches a method of aligning Transmission Time Intervals of physical channels in the uplink and downlink directions of a bidirectional radio communication system ([0003] (e.g. Discloses a technique for time alignment of uplink CDMA signals for a static (FWA) or low mobility communication system. Discloses the concept of a

base station signaling to subscriber terminals to alter their transmission timings for the uplink signals back to the base station such that the multiple received copies of a signal from a subscriber terminal are translated in time. By controlling the time translation of these signal copies, or components, from a number of subscriber terminals such that the main (strongest) signal component from each subscriber terminal is time aligned with the main signal component of the other subscriber stations, the effect of cross-interference between the terminals can be minimized. This is of particular advantage when the CDMA codes used by the individual subscriber terminals are designed to be orthogonal. A well known example of orthogonal CDMA codes is the Walsh-Hadamard functions, commonly used in the downlink of CDMA mobile systems)).

the method comprising: measuring or estimating the response processing delay at a user terminal ([0005] (e.g. The system works by initially determining (i.e. estimating) the round trip (i.e. bidirectional) propagation delay between the base station and a subscriber (i.e. user) terminal, the base station then setting an initial synchronization parameter (T.sub.INIT_SYNC) to compensate for the delay. Once a call is in progress, the synchronization of the transmission timing can be adjusted to take account of changes in the multipath environment or the terminal's location that may alter the received time of the multiple copies of a signal from the subscriber terminal by using a time alignment bit (TAB)));

delaying the Transmission Time Intervals of an uplink physical channel with respect to a corresponding downlink physical channel or channels by an amount dependent upon the measurement or estimate ([0005] (e.g. As there may be errors during the transmission of the TABs, at the subscriber terminal, a number of TABs are combined over a 200 millisecond

interval. If the average exceeds a threshold value the transmission is delayed by a predetermined amount (i.e. 1/8 chip or estimate), whereas if the average is less than or equal to a threshold the transmission time is advanced by a predetermined amount (or estimate time))).

Hashem does not expressly teach the aligning Transmission Time for WCDMA. However, the preceding limitation is known in the art of communications. In the same field of endeavor, Willenegger teaches the aligning Transmission Time interval for WCDMA ([0126] (e.g. In the case of the SCH in UTRA FDD or WCDMA systems, the SCH time intervals are known after the terminal has successfully acquired the slot timing. Therefore, improving channel estimates in the described way is possible in such systems)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invitation to implement the method of Willenegger within the method of Hashem to allow two or more CDMA or WCDMA communication interface protocol in a wireless network. The new method gives flexibility and hence versatile network. The new method speed-up network traffic flow with increased system capacity and making it easier to manage.

Regarding claim 2, Hashem in view of Willenegger teaches all the limitations above. Willenegger further teaches the method of claim 1, wherein said bidirectional radio communication system is a WCDMA system ([0025, 0027] (e.g. The embodiment employs a spread-spectrum wireless communication system employing Wideband-Code Division-Multiple Access (W-CDMA). Wireless communication systems are widely deployed to provide various types of communication such as voice, data, and so on. [0027] each standard specifically defines

the processing of data for transmission from base station to mobile, and vice versa (i.e. bidirectional))).

Regarding claim 3, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the method of claim 1, wherein the amount by which the Transmission Time Intervals (TTIs) of the uplink physical channel are delayed is the minimum number of radio frame time intervals required to exceed the response processing delay ([0005] (e.g. As there may be errors during the transmission of the TABs, at the subscriber terminal, a number of TABs are combined over a 200 millisecond interval (i.e. Transmission Time Intervals (TTIs)). If the average exceeds a threshold value the transmission is delayed by a predetermined amount (1/8 chip), whereas if the average is less than or equal to a threshold the transmission time is advanced by a predetermined amount (i.e. delay TTIs of the uplink is equal or greater than the minimum number of radio frame time intervals required to exceed the response processing delay))).

Regarding claim 4, Hashem in view of Willenegger teaches all the limitations above. Willenegger further teaches the method of claim 1, wherein said data is data which generates an automatic response on the part of the user terminal ([0027] (e.g. each standard (i.e. WCDMA) specifically defines the processing of data (I.e. received data packet at the receiving terminal. Analyzed data and generate response automatically) for transmission from base station to mobile, and vice versa).

Regarding claim 5, Hashem in view of Willenegger teaches all the limitations above. Willenegger further teaches the method of claim 4, wherein said response contains an

acknowledgement to the sender of the data terminal ([0152] (e.g. As the ACK/NACK is used to confirm transmissions (i.e. ACK message is generated automatically at receiving user terminal in response of the data packet received from the originating user terminal).

Regarding claim 6, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the method of claim 1, wherein the user terminal measures its response processing delay and computes the amount of delay to be applied to uplink Transmission Time Intervals based upon that measurement, and signals that delay amount to the Radio Access Network of the WCDMA system ([0004, 0005] (e.g. The 3GPP international wireless standards body for 3.sup.rd Generation Mobile Systems, for example, has been discussing a SCDMA concept for mobile terminals in which the base station (also known as "Node-B") sends a time alignment (tracking) command every 200 milliseconds instructing a subscriber terminal to advance or delay its transmission by 1/8 of a chip (i.e. Estimate or measures its response processing delay and computes the amount of delay to be applied to uplink). This process is described in the 3GPP standards document 3GPP TSG RAN WG 1 #19 document TR25.854 version 0.2.0 (Study Report on USTS) dated Feb. 27-Mar. 1, 2001. This document discloses an uplink synchronous transmission scheme (USTS) for low mobility terminals, especially intended for indoor and dense pedestrian environments)).

Regarding claim 7, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the method of claim 1, wherein the response processing delay is measured by the user terminal and is transmitted to the Radio Access Network, and the Radio Access Network determines an appropriate delay amount based upon the received measurement, and sends the delay amount to the user terminal ([0005] (e.g. The system works by initially

determining the round trip propagation delay between the base station and a subscriber terminal (i.e. user terminal), the base station then setting an initial synchronization parameter (T.sub.INIT_SYNC) to compensate for the delay. Once a call is in progress, the synchronization of the transmission timing (i.e. received measurement of time) can be adjusted to take account of changes in the multipath environment or the terminal's location (i.e. Access Network point) that may alter (i.e. determines an appropriate delay amount based upon the received measurement) the received time of the multiple copies of a signal from the subscriber terminal by using a time alignment bit (TAB). A proposal for standardizing this in the 3GPP system is to replace the terminal power control bit (PCB) with a TAB every two frames (20 milliseconds))).

Regarding claim 8, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the method of claim 1, wherein the response processing delay or an uplink Transmission Time Interval delay amount is pre-programmed into a memory of the user terminal ([0235] (e.g. The steps of a method or algorithm (i.e. response processing delay or an uplink Transmission Time Interval delay) described in connection may be embodied directly in hardware, in a software module executed by a processor, or in a combination of the two. A software module may reside in RAM memory, flash memory, ROM memory (i.e. delay time amount is pre-programmed into a memory), EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, or any other form of storage medium known in the art)).

Regarding claim 9, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the method of claim 8, wherein the response processing delay or an uplink Transmission Time Interval delay amount is sent from the user terminal to the Radio

Access Network ([0005] (e.g. The system works by initially determining the round trip propagation delay between the base station and a subscriber terminal (i.e. user terminal), the base station then setting an initial synchronization parameter (T.sub.INIT_SYNC) to compensate for the delay. Once a call is in progress, the synchronization of the transmission timing (i.e. received measurement of time) can be adjusted to take account of changes in the multipath environment or the terminal's location (i.e. Access Network point) that may alter the received time of the multiple copies of a signal from the subscriber terminal by using a time alignment bit (TAB))).

Regarding claim 10, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the method of claim 7, wherein the Radio Access Network uses the received response processing delay or an uplink Transmission Time Interval delay amount to determine the delay amount for the said user terminal and, optionally, for other user terminals communicating with the Radio Access Network ([0004, 0005] (e.g. The 3GPP international wireless standards body for 3.sup.rd Generation Mobile Systems, for example, has been discussing a SCDMA concept for mobile terminals in which the base station (also known as "Node-B") sends a time alignment (tracking) command every 200 milliseconds instructing a subscriber terminal to advance or delay its transmission by 1/8 of a chip (i.e. Estimate or measures its response processing delay and computes the amount of delay to be applied to uplink). This process is described in the 3GPP standards document 3GPP TSG RAN WG 1 #19 document TR25.854 version 0.2.0 (Study Report on USTS) dated Feb. 27-Mar. 1, 2001. This document discloses an uplink synchronous transmission scheme (i.e. communication synchronization in Radio access network) for low mobility terminals, especially intended for indoor and dense pedestrian environments)).

3. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashem et al. (US 20030058833 A1), in view of Willenegger et al. (US 20030174675 A1).

Regarding claim 11, Hashem teaches a user terminal for use with a bidirectional radio communication system ([0003] (e.g. Discloses a technique for time alignment of uplink CDMA signals for a static (FWA) or low mobility communication system. Discloses the concept of a base station signaling to subscriber terminals to alter their transmission timings for the uplink signals back to the base station such that the multiple received copies of a signal from a subscriber terminal are translated in time. By controlling the time translation of these signal copies, or components, from a number of subscriber terminals such that the main (strongest) signal component from each subscriber terminal is time aligned with the main signal component of the other subscriber stations, the effect of cross-interference between the terminals can be minimized),

the terminal comprising means for delaying the Transmission Time Intervals of an uplink physical channel with respect to those of a corresponding downlink physical channel or channels by an amount dependent upon a measurement or estimate of the response processing delay of the terminal ([0005] (e.g. The system works by initially determining (i.e. estimating) the round trip (i.e. bidirectional) propagation delay between the base station and a subscriber (i.e. user) terminal, the base station then setting an initial synchronization parameter (T.sub.INIT_SYNC) to compensate for the delay. Once a call is in progress, the synchronization of the transmission

timing can be adjusted to take account of changes in the multipath environment or the terminal's location that may alter the received time of the multiple copies of a signal from the subscriber terminal by using a time alignment bit (TAB)));

([0005] (e.g. as there may be errors during the transmission of the TABs, at the subscriber terminal, a number of TABs are combined over a 200 millisecond interval. If the average exceeds a threshold value the transmission is delayed (i.e. delaying the Transmission Time Intervals of an uplink) by a predetermined amount (i.e. 1/8 chip or estimate), whereas if the average is less than or equal to a threshold the transmission time is advanced by a predetermined amount (or estimate time))).

Hashem does not expressly teach the aligning Transmission Time Intervals for WCDMA. However, the preceding limitation is known in the art of communications. In the same field of endeavor, Willenegger teaches the aligning Transmission Time interval for WCDMA ([0126] (e.g. In the case of the SCH in UTRA FDD or WCDMA systems, the SCH time intervals are known after the terminal has successfully acquired the slot timing. Therefore, improving channel estimates in the described way is possible in such systems)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invitation to implement the method of Willenegger within the method of Hashem to allow two or more CDMA or WCDMA communication interface protocol in a wireless network. The new method gives flexibility and hence versatile network. The new method speed-up network traffic flow with increased system capacity and making it easier to manage.

Regarding claim 12, Hashem in view of Willenegger teaches all the limitations above. Hashem further teaches the terminal according to claim 11 and comprising means for measuring the response processing delay or a memory for storing a predefined response processing delay or delay amount ([0235] (e.g. The steps of a method or algorithm (i.e. response processing delay or an uplink Transmission Time Interval delay) described in connection may be embodied directly in hardware, in a software module executed by a processor, or in a combination of the two. A software module may reside in RAM memory, flash memory, ROM memory (i.e. delay time amount is pre-programmed into a memory), EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, or any other form of storage medium known in the art)).

4. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashem et al. (US 20030058833 A1), in view of Willenegger et al. (US 20030174675 A1).

Regarding claim 13, Hashem teaches a Radio Network Controller for use in a Radio Access Network of a system, the Controller comprising means for processing uplink physical channels taking into account delays, relative to the corresponding downlink physical channels, in the Transmission Time Intervals introduced by the sending user terminals based upon respective measures or estimates of the user terminal processing powers ([0003] (e.g. Discloses a technique for time alignment of uplink CDMA signals for a static (FWA) or low mobility communication system. Discloses the concept of a base station signaling to subscriber terminals to alter their transmission timings for the uplink signals back to the base station such that the multiple

received copies of a signal from a subscriber terminal are translated in time. By controlling the time translation of these signal copies, or components, from a number of subscriber terminals such that the main (strongest) signal component from each subscriber terminal is time aligned with the main signal component of the other subscriber stations, the effect of cross-interference between the terminals can be minimized));

([0005] (e.g. The system works by initially determining (i.e. estimating) the round trip (i.e. bidirectional) propagation delay between the base station and a subscriber (i.e. user) terminal, the base station then setting an initial synchronization parameter (T.sub.INIT_SYNC) to compensate for the delay. Once a call is in progress, the synchronization of the transmission timing can be adjusted to take account of changes in the multipath environment or the terminal's location that may alter the received time of the multiple copies of a signal from the subscriber terminal by using a time alignment bit (TAB)));

([0005] (e.g. as there may be errors during the transmission of the TABs, at the subscriber terminal, a number of TABs are combined over a 200 millisecond interval. If the average exceeds a threshold value the transmission is delayed (i.e. delaying the Transmission Time Intervals of an uplink) by a predetermined amount (i.e. 1/8 chip or estimate), whereas if the average is less than or equal to a threshold the transmission time is advanced by a predetermined amount (or estimate time))).

Hashem does not expressly teach the aligning Transmission Time Intervals for WCDMA. However, the preceding limitation is known in the art of communications. In the same field of endeavor, Willenegger teaches the aligning Transmission Time interval for WCDMA ([0126]

(e.g. In the case of the SCH in UTRA FDD or WCDMA systems, the SCH time intervals are known after the terminal has successfully acquired the slot timing. Therefore, improving channel estimates in the described way is possible in such systems)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invitation to implement the method of Willenegger within the method of Hashem to allow two or more CDMA or WCDMA communication interface protocol in a wireless network. The new method gives flexibility and hence versatile network. The new method speed-up network traffic flow with increased system capacity and making it easier to manage.

5. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashem et al. (US 20030058833 A1), in view of Willenegger et al. (US 20030174675 A1).

Regarding claim 14, Hashem teaches a method of controlling the broadcast power levels at a node of a bidirectional communication system, the method comprising sending power control signals to said node from a peer node at regular intervals on an uplink channel ([0005, 0006] (e.g. The system works by initially determining the round trip (i.e. bidirectional) propagation delay between the base station and a subscriber terminal, the base station then setting an initial synchronization parameter (T.sub.INIT_SYNC) to compensate for the delay. Once a call is in progress, the synchronization of the transmission timing can be adjusted to take account of changes in the multipath environment or the terminal's location that may alter the received time of the multiple copies of a signal from the subscriber terminal by using a time alignment bit

(TAB). A proposal for standardizing this in the 3GPP system is to replace the terminal power control bit with a TAB every two frames or 20 milliseconds (i.e. sending power control signals to said node from a peer node at regular intervals on an uplink channel)))

the uplink and downlink channels being synchronized to ensure correct correlation between the power control signals and the respective broadcast power levels ([0006] (e.g. As a mobile subscriber terminal moves about the environment, the main or highest power received signal component may suddenly fade and a previously low power signal component may become the dominant one. A tracking process as discussed for the standard only adjusts the transmission timing of a subscriber unit by 1/8 chip every 200 milliseconds (i.e. the uplink and downlink channels being synchronized to correlate power level). It would take some time to change transmission timing to align a new component of the signal and during this time interference persists. As the new component may be offset in time by up to a few microseconds, sending time alignment commands every 200 milliseconds with a step size of 1/8 chip is too slow in a mobile environment. (In the 3GPP standard 1/8 of a chip has duration of approximately 32 nanoseconds))) .

Hashem does not expressly teach the aligning Transmission power in WCDMA. However, the preceding limitation is known in the art of communications. In the same field of endeavor, Willenegger teaches the aligning Transmission power in uplink and downlink ([0033] (e.g. FIG. 2 illustrates a downlink dedicated physical channel, the Downlink Dedicated Physical Channel (downlink DPCH) in a W-CDMA system. Multiple logical channels referred to as Transport Channels (TrCHs) are multiplexed to form one physical channel, i.e., DPCH. In other words, within one downlink DPCH, dedicated data generated at higher layers are multiplexed

together. The dedicated transport channel (DCH) is transmitted in time-multiplex with control information, such as known pilot bits, Transmit Power Control (TPC) commands, and an optional Transport Format Combination Indicator (TFCI). The downlink DPCH therefore may be seen as a time multiplex of a downlink Dedicated Physical Data Channel (DPDCH) and a downlink Dedicated Physical Control Channel (DPCCH))); ([0140] (e.g. In one embodiment, the DPCCH includes dedicated pilot bits, uplink Transmit Power Control (TPC) bits and Transport Format Combination Index (TFCI) bits. The dedicated pilot bits are used to compute the downlink SNR. In the inner loop of DLPC (DL Power Control), this SNR is compared to the target SNR, set by the outer loop. If the computed SNR is less than the target SNR, the UE signals to the Node-B to increase the transmit power. The presence of SCH on these bit-locations degrades the SNR estimate. Therefore, the computed SNR at these locations is always lower, resulting in the UE signaling the Node-B to increase the transmit power)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invitation to implement the method of Willenegger within the method of Hashem to allow two or more CDMA or WCDMA communication interface protocol in a wireless network. The new method gives flexibility and hence versatile network. The new method speed-up network traffic flow with increased system capacity and making it easier to manage.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Baines et al. (US 6421334 B1) - Technique for time alignment of uplink CDMA signals.
2. Grilli et al. (US 20030007470 A1) - Method and apparatus for time -aligning transmissions from multiple base stations in a CDMA communication system.
3. Chen et al. (US 20030054825 A1) - Method and apparatus for controlling transmission power while in soft handoff.
4. Hargrave et al. (US 5604733 A) - Dynamic time slot alignment in a digital radio communication system.
5. Yeung et al. (US 5835496 A) - Method and apparatus for data alignment.
6. Teder et al. (US 5828659 A) - Time alignment of transmission in a down-link of CDMA system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHENDRA R. PATEL whose telephone number is 571-270-7499. The examiner can normally be reached on 8:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis West can be reached on 571-272-7859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MAHENDRA R PATEL/
Examiner, Art Unit 4172
/ Jean A Gelin/
Primary Examiner, Art Unit 2617